

## **THE AMENDMENTS**

### **In the Claims:**

1. (Previously Presented) A conjugate comprising (a) an amphiphilic transport peptide of human origin as a transmembrane module, (b) a nuclear localization sequence, wherein said nuclear localization sequence is covalently coupled to the transmembrane module via a cleavable spacer, and (c) a signalling and/or drug carrying module.
2. (Previously Presented) The conjugate of claim 1, wherein the signalling and/or drug carrying module comprises Gd, Ga, Mn, I, Fe and/or F as image creating compound.
3. (Previously Presented) The conjugate of claim 1, wherein the transmembrane module is the human homeobox protein HOX-B1 or derivative thereof having an amino acid sequence identity to HOX-B1 of at least 60%.
4. (Currently Amended) The conjugate of claim 3, wherein the transmembrane module comprises the amino acid sequence TQVKIWFQNRMRMKQKK (SEQ ID NO: 1).
5. (Currently Amended) The conjugate according to claim 1, wherein the nuclear localization sequence comprises the amino acid sequence PKKKRKV (SEQ ID NO: 3) or KPKRVKK (SEQ ID NO: 5).
6. (Previously Presented) The conjugate according to claim 1, wherein the nuclear localization sequence is coupled to the signalling and/or drug carrying module or a compound trapping the signalling and/or drug carrying module via a non-cleavable spacer II.
7. (Currently Amended) The conjugate according to claim 6, wherein the cleavable spacer [[I ]] comprises a cleavable disulfide bridge.
8. (Previously Presented) The conjugate according to claim 6, wherein spacer II is polylysine.
9. (Previously Presented) The conjugate according to claim 6, wherein spacer II carries an FITC label.
10. (Previously Presented) The conjugate according to claim 1, wherein the conjugate has the

following structure: transmembrane module - spacer I – nuclear localization sequence - spacer II  
- signalling and/or drug carrying module or compound trapping the signalling and/or drug  
carrying module + signalling and/or drug carrying module.

11. (Previously Presented) The conjugate of claim 1, wherein said conjugate further comprises a cytotoxic drug.

12-16. (Cancelled)

17. (New) The conjugate of claim 1, wherein the conjugate is used as a diagnostic composition for cell tracking.

18. (New) The conjugate of claim 1, wherein the conjugate is used as a contrast agent for MRI.

19. (New) The conjugate of claim 1, wherein the conjugate is used as a diagnostic composition for determining the activity of DNA repair enzymes.

20. (New) The conjugate of claim 1, wherein the conjugate is used as a pharmaceutical composition for the chemotherapeutical treatment of a tumor.

21. (New) The conjugate of claim 1, wherein the conjugate is used as a pharmaceutical composition for the intranuclear GNCT-treatment of a tumor.